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10 August 2016

Doug Close
Bristol Environmental Remediation Services, LLC
111 West 16th Avenue, Third Floor
Anchorage, AK 99501

RE: RR5 Walter Reed Medical Center (Laboratory WorkOrder # 1607145)

Enclosed are the results of analyses for samples received by the laboratory on 07/20/2016 11:53. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Marianne J. Walker

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**Project Manager** 

# Laboratory Case Narrative for Laboratory WorkOrder # 1607145

The samples were received and processed using normal regulatory and laboratory protocols. Unless noted in the Final Report, there were no significant data anomalies or failures noted during data assessment and reporting. The results within this report relate only to the samples received and reported for this project and this report shall not be reproduced except in full, without the approval of Empirical Laboratories, LLC. Data uncertainty is linked to the method and regulatory mandated quality control data associated with the sample. Prior to accepting a Project, Empirical Laboratories, LLC verifies certification requirements and where applicable ensures that the requirements are in place prior to sample analysis. Many states do not carry matrix or program specific certifications. A listing of certifications held by Empirical Laboratories, LLC is included at the end of this report.

#### EPA 8082

To reduce matrix interference, the sample extract has undergone sulfuric acid clean-up, method 3665. The samples are flagged with the C5 qualifier.

CCV2 and CCV3 recovered slightly high for Aroclor-1242 and Aroclor-1248 on column 1, but were within acceptable criteria on column 2 and all associated samples were non-detect for these PCB's. The data was reported and flagged with the X qualifier.

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Client Sample ID: WRTV88-D13.5-14

Lab Sample ID: 1607145-01

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 10:00 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL Units	Dilution	Analyzed	Method	Batch	Notes
Classical Chemistry Parameters								
% Solids	85	1.0	1.0 %	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCBs	by GC							C5
Aroclor-1016	ND	4.84	19.4 ug/Kg dr	y 1	07/21/16 21:51	SW8082A	6G20230	U
Aroclor-1221	ND	4.84	19.4 ug/Kg dr	y 1	07/21/16 21:51	SW8082A	6G20230	U
Aroclor-1232	ND	4.84	19.4 ug/Kg dr	y 1	07/21/16 21:51	SW8082A	6G20230	U
Aroclor-1242	ND	4.84	19.4 ug/Kg dr	y 1	07/21/16 21:51	SW8082A	6G20230	XU
Aroclor-1248	ND	4.84	19.4 ug/Kg dr	y 1	07/21/16 21:51	SW8082A	6G20230	XU
Aroclor-1254	ND	4.84	19.4 ug/Kg dr	y 1	07/21/16 21:51	SW8082A	6G20230	U
Aroclor-1260	ND	4.84	19.4 ug/Kg dr	y 1	07/21/16 21:51	SW8082A	6G20230	U
Aroclor-1262	ND	4.84	19.4 ug/Kg dr	y 1	07/21/16 21:51	SW8082A	6G20230	U
Aroclor-1268	ND	4.84	19.4 ug/Kg dr	y 1	07/21/16 21:51	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			71.4 % 44-130		07/21/16 21:51	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			76.0 % 44-130		07/21/16 21:51	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			68.4 % 54-121		07/21/16 21:51	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			78.8 % 54-121		07/21/16 21:51	SW8082A	6G20230	

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Client Sample ID: WRTV88-D14-14.5

Lab Sample ID: 1607145-02

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 10:05 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL Units	Dilution	Analyzed	Method	Batch	Notes
<b>Classical Chemistry Parameters</b>								
% Solids	77	1.0	1.0 %	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCBs	s by GC							C5
Aroclor-1016	ND	5.30	21.2 ug/Kg dr	y 1	07/21/16 22:33	SW8082A	6G20230	U
Aroclor-1221	ND	5.30	21.2 ug/Kg dr	y 1	07/21/16 22:33	SW8082A	6G20230	U
Aroclor-1232	ND	5.30	21.2 ug/Kg dr	y 1	07/21/16 22:33	SW8082A	6G20230	U
Aroclor-1242	ND	5.30	21.2 ug/Kg dr	y 1	07/21/16 22:33	SW8082A	6G20230	XU
Aroclor-1248	ND	5.30	21.2 ug/Kg dr	y 1	07/21/16 22:33	SW8082A	6G20230	XU
Aroclor-1254	ND	5.30	21.2 ug/Kg dr	y 1	07/21/16 22:33	SW8082A	6G20230	U
Aroclor-1260 [2C]	287	5.30	21.2 ug/Kg dr	y 1	07/21/16 22:33	SW8082A	6G20230	
Aroclor-1262	ND	5.30	21.2 ug/Kg dr	y 1	07/21/16 22:33	SW8082A	6G20230	U
Aroclor-1268	ND	5.30	21.2 ug/Kg dr	y 1	07/21/16 22:33	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			59.8 % 44-130		07/21/16 22:33	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			64.7 % 44-130		07/21/16 22:33	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			73.0 % 54-121		07/21/16 22:33	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			85.6 % 54-121		07/21/16 22:33	SW8082A	6G20230	

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Client Sample ID: WRTV88-A11.5-12

**Lab Sample ID: 1607145-03** 

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 11:35 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL Units	Dilution	Analyzed	Method	Batch	Notes
<b>Classical Chemistry Parameters</b>								
% Solids	80	1.0	1.0 %	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCBs	s by GC							C5
Aroclor-1016	ND	5.11	20.5 ug/Kg d	ry 1	07/21/16 22:47	SW8082A	6G20230	U
Aroclor-1221	ND	5.11	20.5 ug/Kg d	ry 1	07/21/16 22:47	SW8082A	6G20230	U
Aroclor-1232	ND	5.11	20.5 ug/Kg d	ry 1	07/21/16 22:47	SW8082A	6G20230	U
Aroclor-1242	ND	5.11	20.5 ug/Kg d	ry 1	07/21/16 22:47	SW8082A	6G20230	XU
Aroclor-1248	ND	5.11	20.5 ug/Kg d	ry 1	07/21/16 22:47	SW8082A	6G20230	XU
Aroclor-1254	ND	5.11	20.5 ug/Kg d	ry 1	07/21/16 22:47	SW8082A	6G20230	U
Aroclor-1260	ND	5.11	20.5 ug/Kg d	ry 1	07/21/16 22:47	SW8082A	6G20230	U
Aroclor-1262	ND	5.11	20.5 ug/Kg d	ry 1	07/21/16 22:47	SW8082A	6G20230	U
Aroclor-1268	ND	5.11	20.5 ug/Kg d	ry 1	07/21/16 22:47	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			62.7 % 44-130		07/21/16 22:47	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			77.3 % 44-130		07/21/16 22:47	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			64.4 % 54-121		07/21/16 22:47	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			77.1 % 54-121		07/21/16 22:47	SW8082A	6G20230	

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Client Sample ID: WRTV88-A13.5-14

Lab Sample ID: 1607145-04

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 11:40 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL Unit	s Dilution	Analyzed	Method	Batch	Notes
Classical Chemistry Parameters								
% Solids	82	1.0	1.0 %	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCBs	by GC							C5
Aroclor-1016	ND	5.01	20.1 ug/Kg	dry 1	07/21/16 23:01	SW8082A	6G20230	U
Aroclor-1221	ND	5.01	20.1 ug/Kg	dry 1	07/21/16 23:01	SW8082A	6G20230	U
Aroclor-1232	ND	5.01	20.1 ug/Kg	dry 1	07/21/16 23:01	SW8082A	6G20230	U
Aroclor-1242	ND	5.01	20.1 ug/Kg	dry 1	07/21/16 23:01	SW8082A	6G20230	XU
Aroclor-1248	ND	5.01	20.1 ug/Kg	dry 1	07/21/16 23:01	SW8082A	6G20230	XU
Aroclor-1254	ND	5.01	20.1 ug/Kg	dry 1	07/21/16 23:01	SW8082A	6G20230	U
Aroclor-1260	ND	5.01	20.1 ug/Kg	dry 1	07/21/16 23:01	SW8082A	6G20230	U
Aroclor-1262	ND	5.01	20.1 ug/Kg	dry 1	07/21/16 23:01	SW8082A	6G20230	U
Aroclor-1268	ND	5.01	20.1 ug/Kg	dry 1	07/21/16 23:01	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			73.8 % 44-13	0	07/21/16 23:01	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			76.8 % 44-13	0	07/21/16 23:01	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			73.0 % 54-12	1	07/21/16 23:01	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			83.1 % 54-12	1	07/21/16 23:01	SW8082A	6G20230	

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Client Sample ID: WRTV88-B13-13.5

Lab Sample ID: 1607145-05

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 13:55 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL Unit	s Dilution	Analyzed	Method	Batch	Notes
Classical Chemistry Parameters								
% Solids	74	1.0	1.0 %	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCBs	by GC							C5
Aroclor-1016	ND	5.49	22.0 ug/Kg	dry 1	07/21/16 23:15	SW8082A	6G20230	U
Aroclor-1221	ND	5.49	22.0 ug/Kg	dry 1	07/21/16 23:15	SW8082A	6G20230	U
Aroclor-1232	ND	5.49	22.0 ug/Kg	dry 1	07/21/16 23:15	SW8082A	6G20230	U
Aroclor-1242	ND	5.49	22.0 ug/Kg	dry 1	07/21/16 23:15	SW8082A	6G20230	XU
Aroclor-1248	ND	5.49	22.0 ug/Kg	dry 1	07/21/16 23:15	SW8082A	6G20230	XU
Aroclor-1254	ND	5.49	22.0 ug/Kg	dry 1	07/21/16 23:15	SW8082A	6G20230	U
Aroclor-1260	ND	5.49	22.0 ug/Kg	dry 1	07/21/16 23:15	SW8082A	6G20230	U
Aroclor-1262	ND	5.49	22.0 ug/Kg	dry 1	07/21/16 23:15	SW8082A	6G20230	U
Aroclor-1268	ND	5.49	22.0 ug/Kg	dry 1	07/21/16 23:15	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			71.7 % 44-13	0	07/21/16 23:15	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			71.3 % 44-13	0	07/21/16 23:15	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			67.0 % 54-12	1	07/21/16 23:15	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			73.6 % 54-12	1	07/21/16 23:15	SW8082A	6G20230	

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Client Sample ID: WRTV88-B14-14.5

Lab Sample ID: 1607145-06

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 13:55 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL Un	its Diluti	ion Analyzed	Method	Batch	Notes
<b>Classical Chemistry Parameters</b>								
% Solids	80	1.0	1.0 %	6 1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCBs	by GC							C5
Aroclor-1016	ND	5.10	20.4 ug/K	g dry 1	07/21/16 23:30	SW8082A	6G20230	U
Aroclor-1221	ND	5.10	20.4 ug/K	g dry 1	07/21/16 23:30	SW8082A	6G20230	U
Aroclor-1232	ND	5.10	20.4 ug/K	g dry 1	07/21/16 23:30	SW8082A	6G20230	U
Aroclor-1242	ND	5.10	20.4 ug/K	g dry 1	07/21/16 23:30	SW8082A	6G20230	XU
Aroclor-1248	ND	5.10	20.4 ug/K	g dry 1	07/21/16 23:30	SW8082A	6G20230	XU
Aroclor-1254	ND	5.10	20.4 ug/K	g dry 1	07/21/16 23:30	SW8082A	6G20230	U
Aroclor-1260	ND	5.10	20.4 ug/K	g dry 1	07/21/16 23:30	SW8082A	6G20230	U
Aroclor-1262	ND	5.10	20.4 ug/K	g dry 1	07/21/16 23:30	SW8082A	6G20230	U
Aroclor-1268	ND	5.10	20.4 ug/K	g dry 1	07/21/16 23:30	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			81.3 % 44-1	30	07/21/16 23:30	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			83.6 % 44-1	30	07/21/16 23:30	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			74.3 % 54-1	21	07/21/16 23:30	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			81.8 % 54-1	21	07/21/16 23:30	SW8082A	6G20230	

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Client Sample ID: WRTV88-B14-14.5D

**Lab Sample ID: 1607145-07** 

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 13:55 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL Units	Dilution	Analyzed	Method	Batch	Notes
Classical Chemistry Parameters								
% Solids	81	1.0	1.0 %	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCBs	by GC							C5
Aroclor-1016	ND	5.10	20.4 ug/Kg dry	y 1	07/21/16 23:44	SW8082A	6G20230	U
Aroclor-1221	ND	5.10	20.4 ug/Kg dry	y 1	07/21/16 23:44	SW8082A	6G20230	U
Aroclor-1232	ND	5.10	20.4 ug/Kg dry	y 1	07/21/16 23:44	SW8082A	6G20230	U
Aroclor-1242	ND	5.10	20.4 ug/Kg dry	y 1	07/21/16 23:44	SW8082A	6G20230	XU
Aroclor-1248	ND	5.10	20.4 ug/Kg dry	y 1	07/21/16 23:44	SW8082A	6G20230	XU
Aroclor-1254	ND	5.10	20.4 ug/Kg dry	y 1	07/21/16 23:44	SW8082A	6G20230	U
Aroclor-1260	ND	5.10	20.4 ug/Kg dry	y 1	07/21/16 23:44	SW8082A	6G20230	U
Aroclor-1262	ND	5.10	20.4 ug/Kg dry	y 1	07/21/16 23:44	SW8082A	6G20230	U
Aroclor-1268	ND	5.10	20.4 ug/Kg dry	y 1	07/21/16 23:44	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			65.4 % 44-130		07/21/16 23:44	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			64.5 % 44-130		07/21/16 23:44	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			61.1 % 54-121		07/21/16 23:44	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			66.5 % 54-121		07/21/16 23:44	SW8082A	6G20230	

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Client Sample ID: WRTV88-C11-11.5

Lab Sample ID: 1607145-08

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 14:30 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL U	nits	Dilution	Analyzed	Method	Batch	Notes
Classical Chemistry Parameters									
% Solids	86	1.0	1.0	%	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCBs	s by GC								C5
Aroclor-1016	ND	4.73	18.9 ug/l	Kg dry	1	07/21/16 23:58	SW8082A	6G20230	U
Aroclor-1221	ND	4.73	18.9 ug/I	Kg dry	1	07/21/16 23:58	SW8082A	6G20230	U
Aroclor-1232	ND	4.73	18.9 ug/l	Kg dry	1	07/21/16 23:58	SW8082A	6G20230	U
Aroclor-1242	ND	4.73	18.9 ug/l	Kg dry	1	07/21/16 23:58	SW8082A	6G20230	XU
Aroclor-1248	ND	4.73	18.9 ug/l	Kg dry	1	07/21/16 23:58	SW8082A	6G20230	XU
Aroclor-1254	ND	4.73	18.9 ug/l	Kg dry	1	07/21/16 23:58	SW8082A	6G20230	U
Aroclor-1260	ND	4.73	18.9 ug/l	Kg dry	1	07/21/16 23:58	SW8082A	6G20230	U
Aroclor-1262	ND	4.73	18.9 ug/l	Kg dry	1	07/21/16 23:58	SW8082A	6G20230	U
Aroclor-1268	ND	4.73	18.9 ug/l	Kg dry	1	07/21/16 23:58	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			66.8 % 44-	-130		07/21/16 23:58	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			65.7 % 44-	-130		07/21/16 23:58	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			60.5 % 54-	-121		07/21/16 23:58	SW8082A	6G20230	
Surrogate: Decachlorobiphenyl [2C]			66.7 % 54-	-121		07/21/16 23:58	SW8082A	6G20230	

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Client Sample ID: WRTV88-C14-14.5

Lab Sample ID: 1607145-09

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 14:35 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL U	Jnits	Dilution	Analyzed	Method	Batch	Notes
<b>Classical Chemistry Parameters</b>									
% Solids	83	1.0	1.0	%	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCBs	s by GC								C5
Aroclor-1016	ND	4.94	19.8 ug/	Kg dry	1	07/22/16 01:08	SW8082A	6G20230	U
Aroclor-1221	ND	4.94	19.8 ug/	Kg dry	1	07/22/16 01:08	SW8082A	6G20230	U
Aroclor-1232	ND	4.94	19.8 ug/	Kg dry	1	07/22/16 01:08	SW8082A	6G20230	U
Aroclor-1242	ND	4.94	19.8 ug/	Kg dry	1	07/22/16 01:08	SW8082A	6G20230	U
Aroclor-1248	ND	4.94	19.8 ug/	Kg dry	1	07/22/16 01:08	SW8082A	6G20230	U
Aroclor-1254	ND	4.94	19.8 ug/	Kg dry	1	07/22/16 01:08	SW8082A	6G20230	U
Aroclor-1260	ND	4.94	19.8 ug/	Kg dry	1	07/22/16 01:08	SW8082A	6G20230	U
Aroclor-1262	ND	4.94	19.8 ug/	Kg dry	1	07/22/16 01:08	SW8082A	6G20230	U
Aroclor-1268	ND	4.94	19.8 ug/	Kg dry	1	07/22/16 01:08	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			65.9 % 44	-130		07/22/16 01:08	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			67.4 % 44	-130		07/22/16 01:08	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			61.5 % 54	-121		07/22/16 01:08	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			67.1 % 54	-121		07/22/16 01:08	SW8082A	6G20230	

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Client Sample ID: WRTV15B0-6"

Lab Sample ID: 1607145-10

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 14:15 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL Units	Dilution	Analyzed	Method	Batch	Notes
Classical Chemistry Parameters								
% Solids	85	1.0	1.0 %	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCB	s by GC							C5
Aroclor-1016	ND	23.8	95.3 ug/Kg dr	y 5	07/22/16 01:23	SW8082A	6G20230	U
Aroclor-1221	ND	23.8	95.3 ug/Kg dr	y 5	07/22/16 01:23	SW8082A	6G20230	U
Aroclor-1232	ND	23.8	95.3 ug/Kg dr	y 5	07/22/16 01:23	SW8082A	6G20230	U
Aroclor-1242	ND	23.8	95.3 ug/Kg dr	y 5	07/22/16 01:23	SW8082A	6G20230	U
Aroclor-1248	ND	23.8	95.3 ug/Kg dr	y 5	07/22/16 01:23	SW8082A	6G20230	U
Aroclor-1254	ND	23.8	95.3 ug/Kg dr	y 5	07/22/16 01:23	SW8082A	6G20230	U
Aroclor-1260 [2C]	1430	23.8	95.3 ug/Kg dr	y 5	07/22/16 01:23	SW8082A	6G20230	D
Aroclor-1262	ND	23.8	95.3 ug/Kg dr	y 5	07/22/16 01:23	SW8082A	6G20230	U
Aroclor-1268	ND	23.8	95.3 ug/Kg dr	y 5	07/22/16 01:23	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			78.1 % 44-130		07/22/16 01:23	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			81.2 % 44-130		07/22/16 01:23	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			76.4 % 54-121		07/22/16 01:23	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			94.3 % 54-121		07/22/16 01:23	SW8082A	6G20230	

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Client Sample ID: WRTV15B6-12"

**Lab Sample ID: 1607145-11** 

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 14:20 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL	Units	Dilution	Analyzed	Method	Batch	Notes
<b>Classical Chemistry Parameters</b>									
% Solids	84	1.0	1.0	%	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCB	s by GC								C5
Aroclor-1016	ND	24.7	99.0 u	ıg/Kg dry	5	07/22/16 01:37	SW8082A	6G20230	U
Aroclor-1221	ND	24.7	99.0 u	ıg/Kg dry	5	07/22/16 01:37	SW8082A	6G20230	U
Aroclor-1232	ND	24.7	99.0 u	ıg/Kg dry	5	07/22/16 01:37	SW8082A	6G20230	U
Aroclor-1242	ND	24.7	99.0 u	ıg/Kg dry	5	07/22/16 01:37	SW8082A	6G20230	U
Aroclor-1248	ND	24.7	99.0 u	ıg/Kg dry	5	07/22/16 01:37	SW8082A	6G20230	U
Aroclor-1254	ND	24.7	99.0 u	ıg/Kg dry	5	07/22/16 01:37	SW8082A	6G20230	U
Aroclor-1260	12300	24.7	99.0 u	ıg/Kg dry	5	07/22/16 01:37	SW8082A	6G20230	ED
Aroclor-1262	ND	24.7	99.0 u	ıg/Kg dry	5	07/22/16 01:37	SW8082A	6G20230	U
Aroclor-1268	ND	24.7	99.0 u	ıg/Kg dry	5	07/22/16 01:37	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			81.9 %	44-130		07/22/16 01:37	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			84.0 %	44-130		07/22/16 01:37	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			113 %	54-121		07/22/16 01:37	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			98.3 %	54-121		07/22/16 01:37	SW8082A	6G20230	

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Client Sample ID: WRTV15B6-12" Sample Collection Date/Time: 07/19/2016 14:20
Lab Sample ID: 1607145-11RE1 Sample Received Date/Time: 07/20/2016 11:53

Sample Matrix: Solid

Analyte	Result	MDL	RL	Units	Dilution	Analyzed	Method	Batch	Notes
Organochlorine Pesticides and PCB	s by GC								
Aroclor-1016	ND	247	990	ug/Kg dry	50	07/22/16 18:20	SW8082A	6G20230	U
Aroclor-1221	ND	247	990	ug/Kg dry	50	07/22/16 18:20	SW8082A	6G20230	U
Aroclor-1232	ND	247	990	ug/Kg dry	50	07/22/16 18:20	SW8082A	6G20230	U
Aroclor-1242	ND	247	990	ug/Kg dry	50	07/22/16 18:20	SW8082A	6G20230	U
Aroclor-1248	ND	247	990	ug/Kg dry	50	07/22/16 18:20	SW8082A	6G20230	U
Aroclor-1254	ND	247	990	ug/Kg dry	50	07/22/16 18:20	SW8082A	6G20230	U
Aroclor-1260	14100	247	990	ug/Kg dry	50	07/22/16 18:20	SW8082A	6G20230	D
Aroclor-1262	ND	247	990	ug/Kg dry	50	07/22/16 18:20	SW8082A	6G20230	U
Aroclor-1268	ND	247	990	ug/Kg dry	50	07/22/16 18:20	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			92.2 %	44-130		07/22/16 18:20	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			77.5 %	44-130		07/22/16 18:20	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			98.1 %	54-121		07/22/16 18:20	SW8082A	6G20230	Y
Surrogate: Decachlorobiphenyl [2C]			86.5 %	54-121		07/22/16 18:20	SW8082A	6G20230	

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Client Sample ID: PCB-RB Sample Collection Date/Time: 07/19/2016 14:45
Lab Sample ID: 1607145-12 Sample Received Date/Time: 07/20/2016 11:53

Sample Matrix: Water

Analyte	Result	MDL	RL	Units	Dilution	Analyzed	Method	Batch	Notes
Organochlorine Pesticides and PCB	s by GC								C5
Aroclor-1016	ND	0.128	0.532	ug/L	1	07/21/16 21:08	SW8082A	6G20235	U
Aroclor-1221	ND	0.128	0.532	ug/L	1	07/21/16 21:08	SW8082A	6G20235	U
Aroclor-1232	ND	0.128	0.532	ug/L	1	07/21/16 21:08	SW8082A	6G20235	U
Aroclor-1242	ND	0.128	0.532	ug/L	1	07/21/16 21:08	SW8082A	6G20235	XU
Aroclor-1248	ND	0.128	0.532	ug/L	1	07/21/16 21:08	SW8082A	6G20235	XU
Aroclor-1254	ND	0.128	0.532	ug/L	1	07/21/16 21:08	SW8082A	6G20235	U
Aroclor-1260	ND	0.128	0.532	ug/L	1	07/21/16 21:08	SW8082A	6G20235	U
Aroclor-1262	ND	0.128	0.532	ug/L	1	07/21/16 21:08	SW8082A	6G20235	U
Aroclor-1268	ND	0.128	0.532	ug/L	1	07/21/16 21:08	SW8082A	6G20235	U
Surrogate: Tetrachloro-m-xvlene			79.5 %	44-124		07/21/16 21:08	SW8082A	6G20235	
Surrogate: Tetrachloro-m-xvlene [2C]			82.9 %	44-124		07/21/16 21:08	SW8082A	6G20235	
Surrogate: Decachlorobiphenvl			68.6 %	33-116		07/21/16 21:08	SW8082A	6G20235	
Surrogate: Decachlorobiphenvl [2C]			78.7 %	33-116		07/21/16 21:08	SW8082A	6G20235	

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Client Sample ID: WRTV15-A0-6"

Lab Sample ID: 1607145-13

Sample Received Date/Time: 07/20/2016 11:53

Sample Collection Date/Time: 07/19/2016 13:58

Sample Matrix: Solid

Analyte	Result	MDL	RL Units	Dilutior	n Analyzed	Method	Batch	Notes
<b>Classical Chemistry Parameters</b>								
% Solids	81	1.0	1.0 %	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCBs	by GC							C5
Aroclor-1016	ND	25.6	103 ug/Kg dry	7 5	07/22/16 01:51	SW8082A	6G20230	U
Aroclor-1221	ND	25.6	103 ug/Kg dry	5	07/22/16 01:51	SW8082A	6G20230	U
Aroclor-1232	ND	25.6	103 ug/Kg dry	7 5	07/22/16 01:51	SW8082A	6G20230	U
Aroclor-1242	ND	25.6	103 ug/Kg dry	7 5	07/22/16 01:51	SW8082A	6G20230	U
Aroclor-1248	ND	25.6	103 ug/Kg dry	7 5	07/22/16 01:51	SW8082A	6G20230	U
Aroclor-1254	ND	25.6	103 ug/Kg dry	7 5	07/22/16 01:51	SW8082A	6G20230	U
Aroclor-1260 [2C]	2210	25.6	103 ug/Kg dry	5	07/22/16 01:51	SW8082A	6G20230	D
Aroclor-1262	ND	25.6	103 ug/Kg dry	7 5	07/22/16 01:51	SW8082A	6G20230	U
Aroclor-1268	ND	25.6	103 ug/Kg dry	7 5	07/22/16 01:51	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			81.8 % 44-130		07/22/16 01:51	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			81.9 % 44-130		07/22/16 01:51	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			90.6 % 54-121		07/22/16 01:51	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			84.9 % 54-121		07/22/16 01:51	SW8082A	6G20230	

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Client Sample ID: WRTV15-A6-12"

Lab Sample ID: 1607145-14

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 14:08 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL Units	Dilutio	n Analyzed	Method	Batch	Notes
<b>Classical Chemistry Parameters</b>								
% Solids	77	1.0	1.0 %	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCB	s by GC							C5
Aroclor-1016	ND	26.5	106 ug/Kg o	dry 5	07/22/16 02:05	SW8082A	6G20230	U
Aroclor-1221	ND	26.5	106 ug/Kg o	dry 5	07/22/16 02:05	SW8082A	6G20230	U
Aroclor-1232	ND	26.5	106 ug/Kg o	dry 5	07/22/16 02:05	SW8082A	6G20230	U
Aroclor-1242	ND	26.5	106 ug/Kg o	dry 5	07/22/16 02:05	SW8082A	6G20230	U
Aroclor-1248	ND	26.5	106 ug/Kg o	dry 5	07/22/16 02:05	SW8082A	6G20230	U
Aroclor-1254	ND	26.5	106 ug/Kg o	dry 5	07/22/16 02:05	SW8082A	6G20230	U
Aroclor-1260	11600	26.5	106 ug/Kg o	dry 5	07/22/16 02:05	SW8082A	6G20230	ED
Aroclor-1262	ND	26.5	106 ug/Kg o	dry 5	07/22/16 02:05	SW8082A	6G20230	U
Aroclor-1268	ND	26.5	106 ug/Kg o	dry 5	07/22/16 02:05	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			86.5 % 44-130	)	07/22/16 02:05	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			86.6 % 44-130	)	07/22/16 02:05	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			116 % 54-121		07/22/16 02:05	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			101 % 54-121		07/22/16 02:05	SW8082A	6G20230	

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Client Sample ID: WRTV15-A6-12"
Lab Sample ID: 1607145-14RE1

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 14:08 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL	Units	Dilution	Analyzed	Method	Batch	Notes
Organochlorine Pesticides and PCB	s by GC								
Aroclor-1016	ND	265	1060	ug/Kg dry	50	07/22/16 18:34	SW8082A	6G20230	U
Aroclor-1221	ND	265	1060	ug/Kg dry	50	07/22/16 18:34	SW8082A	6G20230	U
Aroclor-1232	ND	265	1060	ug/Kg dry	50	07/22/16 18:34	SW8082A	6G20230	U
Aroclor-1242	ND	265	1060	ug/Kg dry	50	07/22/16 18:34	SW8082A	6G20230	U
Aroclor-1248	ND	265	1060	ug/Kg dry	50	07/22/16 18:34	SW8082A	6G20230	U
Aroclor-1254	ND	265	1060	ug/Kg dry	50	07/22/16 18:34	SW8082A	6G20230	U
Aroclor-1260	12200	265	1060	ug/Kg dry	50	07/22/16 18:34	SW8082A	6G20230	D
Aroclor-1262	ND	265	1060	ug/Kg dry	50	07/22/16 18:34	SW8082A	6G20230	U
Aroclor-1268	ND	265	1060	ug/Kg dry	50	07/22/16 18:34	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			79.9 %	44-130		07/22/16 18:34	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			79.4 %	44-130		07/22/16 18:34	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			107 %	54-121		07/22/16 18:34	SW8082A	6G20230	Y
Surrogate: Decachlorobiphenvl [2C]			104 %	54-121		07/22/16 18:34	SW8082A	6G20230	

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Client Sample ID: WRTV15-C0-6"

**Lab Sample ID: 1607145-15** 

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 14:28 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL	Units	Dilution	Analyzed	Method	Batch	Notes
<b>Classical Chemistry Parameters</b>									
% Solids	86	1.0	1.0	%	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCBs	s by GC								C5
Aroclor-1016	ND	24.0	96.3 ug	g/Kg dry	5	07/22/16 02:19	SW8082A	6G20230	U
Aroclor-1221	ND	24.0	96.3 ug	g/Kg dry	5	07/22/16 02:19	SW8082A	6G20230	U
Aroclor-1232	ND	24.0	96.3 ug	g/Kg dry	5	07/22/16 02:19	SW8082A	6G20230	U
Aroclor-1242	ND	24.0	96.3 ug	g/Kg dry	5	07/22/16 02:19	SW8082A	6G20230	U
Aroclor-1248	ND	24.0	96.3 ug	g/Kg dry	5	07/22/16 02:19	SW8082A	6G20230	U
Aroclor-1254	ND	24.0	96.3 ug	g/Kg dry	5	07/22/16 02:19	SW8082A	6G20230	U
Aroclor-1260	8820	24.0	96.3 ug	g/Kg dry	5	07/22/16 02:19	SW8082A	6G20230	ED
Aroclor-1262	ND	24.0	96.3 ug	g/Kg dry	5	07/22/16 02:19	SW8082A	6G20230	U
Aroclor-1268	ND	24.0	96.3 ug	g/Kg dry	5	07/22/16 02:19	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			73.3 % 4	4-130		07/22/16 02:19	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			74.2 % 4	4-130		07/22/16 02:19	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			86.9 % 5.	4-121		07/22/16 02:19	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			86.6 % 5	4-121		07/22/16 02:19	SW8082A	6G20230	

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Client Sample ID: WRTV15-C0-6" Sample Collection Date/Time: 07/19/2016 14:28
Lab Sample ID: 1607145-15RE1 Sample Received Date/Time: 07/20/2016 11:53

Sample Matrix: Solid

Analyte	Result	MDL	RL Un	its Dilutio	n Analyzed	Method	Batch	Notes
Organochlorine Pesticides and PCB	s by GC							
Aroclor-1016	ND	240	963 ug/K	g dry 50	07/22/16 18:49	SW8082A	6G20230	U
Aroclor-1221	ND	240	963 ug/K	g dry 50	07/22/16 18:49	SW8082A	6G20230	U
Aroclor-1232	ND	240	963 ug/K	g dry 50	07/22/16 18:49	SW8082A	6G20230	U
Aroclor-1242	ND	240	963 ug/K	g dry 50	07/22/16 18:49	SW8082A	6G20230	U
Aroclor-1248	ND	240	963 ug/K	g dry 50	07/22/16 18:49	SW8082A	6G20230	U
Aroclor-1254	ND	240	963 ug/K	g dry 50	07/22/16 18:49	SW8082A	6G20230	U
Aroclor-1260	9500	240	963 ug/K	g dry 50	07/22/16 18:49	SW8082A	6G20230	D
Aroclor-1262	ND	240	963 ug/K	g dry 50	07/22/16 18:49	SW8082A	6G20230	U
Aroclor-1268	ND	240	963 ug/K	g dry 50	07/22/16 18:49	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			72.4 % 44-1	30	07/22/16 18:49	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			72.9 % 44-1	30	07/22/16 18:49	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			158 % 54-1	21	07/22/16 18:49	SW8082A	6G20230	Y
Surrogate: Decachlorobiphenvl [2C]			86.9 % 54-1	21	07/22/16 18:49	SW8082A	6G20230	

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Client Sample ID: WRTV15-C6-12"

Lab Sample ID: 1607145-16

Sample Matrix: Solid

Sample Collection Date/Time: 07/19/2016 14:35 Sample Received Date/Time: 07/20/2016 11:53

Analyte	Result	MDL	RL U	Jnits	Dilution	Analyzed	Method	Batch	Notes
<b>Classical Chemistry Parameters</b>									
% Solids	83	1.0	1.0	%	1	07/21/16 14:10	SM2540B	6G20231	
Organochlorine Pesticides and PCBs	s by GC								C5
Aroclor-1016	ND	24.8	99.1 ug/	/Kg dry	5	07/22/16 02:33	SW8082A	6G20230	U
Aroclor-1221	ND	24.8	99.1 ug/	/Kg dry	5	07/22/16 02:33	SW8082A	6G20230	U
Aroclor-1232	ND	24.8	99.1 ug/	Kg dry	5	07/22/16 02:33	SW8082A	6G20230	U
Aroclor-1242	ND	24.8	99.1 ug/	/Kg dry	5	07/22/16 02:33	SW8082A	6G20230	U
Aroclor-1248	ND	24.8	99.1 ug/	Kg dry	5	07/22/16 02:33	SW8082A	6G20230	U
Aroclor-1254	ND	24.8	99.1 ug/	Kg dry	5	07/22/16 02:33	SW8082A	6G20230	U
Aroclor-1260 [2C]	4240	24.8	99.1 ug/	Kg dry	5	07/22/16 02:33	SW8082A	6G20230	D
Aroclor-1262	ND	24.8	99.1 ug/	Kg dry	5	07/22/16 02:33	SW8082A	6G20230	U
Aroclor-1268	ND	24.8	99.1 ug/	Kg dry	5	07/22/16 02:33	SW8082A	6G20230	U
Surrogate: Tetrachloro-m-xvlene			92.3 % 44	!-130		07/22/16 02:33	SW8082A	6G20230	
Surrogate: Tetrachloro-m-xvlene [2C]			90.3 % 44	!-130		07/22/16 02:33	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl			95.5 % 54	!-121		07/22/16 02:33	SW8082A	6G20230	
Surrogate: Decachlorobiphenvl [2C]			102 % 54	!-121		07/22/16 02:33	SW8082A	6G20230	

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#### **Classical Chemistry Parameters - Quality Control**

Spike Source %REC RPD
Analyte Result MDL RL Units Level Result %REC Limits RPD Limit Notes

**Batch 6G20231** 

 Duplicate
 Source: 1607145-01
 Prepared: 07/20/2016 Analyzed: 07/21/2016

 % Solids
 68.30
 1.0
 1.0
 %
 84.89
 21.7
 20

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#### Organochlorine Pesticides and PCBs by GC - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6G20230											
Blank			Prepared of	& Analyz	ed: 07/2.1	1/2016					
Aroclor-1016	ND	4.17		ug/Kg		.,2010					U
Aroclor-1016 [2C]	ND	4.17	16.7	wet ug/Kg							U
Aroclor-1221	ND	4.17	16.7	wet ug/Kg wet							U
Aroclor-1221 [2C]	ND	4.17	16.7	ug/Kg wet							U
Aroclor-1232	ND	4.17	16.7	ug/Kg wet							U
Aroclor-1232 [2C]	ND	4.17	16.7	ug/Kg wet							U
Aroclor-1242	ND	4.17	16.7	ug/Kg wet							X, U
Aroclor-1242 [2C]	ND	4.17	16.7	ug/Kg wet							U
Aroclor-1248	ND	4.17	16.7	ug/Kg wet							X, U
Aroclor-1248 [2C]	ND	4.17	16.7	ug/Kg wet							U
Aroclor-1254	ND	4.17	16.7	ug/Kg wet							U
Aroclor-1254 [2C]	ND	4.17	16.7	wet							U
Aroclor-1260	ND	4.17	16.7	ug/Kg wet							U
Aroclor-1260 [2C]	ND	4.17	16.7	ug/Kg wet							U
Aroclor-1262	ND	4.17	16.7	wet							U
Aroclor-1262 [2C]	ND	4.17	16.7	ug/Kg wet							U
Aroclor-1268	ND	4.17	16.7	ug/Kg wet							U
Aroclor-1268 [2C]	ND	4.17	16.7	ug/Kg wet							U
Surrogate: Tetrachloro-m-xylene	14.15			ug/Kg wet	16.67		84.9	44-130			
Surrogate: Tetrachloro-m-xylene [2C]	14.37			ug/Kg wet	16.67		86.2	44-130			
Surrogate: Decachlorobiphenyl	13.47			ug/Kg wet	16.67		80.8	54-121			
Surrogate: Decachlorobiphenyl [2C]	15.14			ug/Kg wet	16.67		90.8	54-121			
LCS			Prepared	& Analyz	ed: 07/21	1/2016					
Aroclor-1016	145.7	4.17	16.7	ug/Kg wet	166.7		87.4	47-134			
Aroclor-1016 [2C]	146.2	4.17	16.7	ug/Kg wet	166.7		87.7	47-134			
Aroclor-1260	142.6	4.17	16.7	ug/Kg wet	166.7		85.6	53-140			

EMPIRICAL LABORATORIES, LLC Work Order: 1607145 Report Date: 08/10/2016

#### Organochlorine Pesticides and PCBs by GC - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
•	Result	WIDL	KL	Omis	Level	Result	/UKLC	Lillius	KI D	Liiiit	Notes
Batch 6G20230											
LCS	151.6		Prepared			/2016		52.110			
Aroclor-1260 [2C]	151.6	4.17	16.7	ug/Kg wet	166.7		90.9	53-140			
Surrogate: Tetrachloro-m-xylene	14.70			ug/Kg wet	16.67		88.2	44-130			
Surrogate: Tetrachloro-m-xylene [2C]	15.59			ug/Kg wet	16.67		93.5	44-130			
Surrogate: Decachlorobiphenyl	14.16			ug/Kg wet	16.67		85.0	54-121			
Surrogate: Decachlorobiphenyl [2C]	15.96			ug/Kg wet	16.67		95.7	54-121			
Matrix Spike	Source: 16071	45-01	Prepared	& Analyz	ed: 07/21	/2016					
Aroclor-1016	151.7	4.84	19.4		193.5	ND	78.4	47-134			
Aroclor-1016 [2C]	154.8	4.84	19.4	-	193.5	ND	80.0	47-134			
Aroclor-1260	157.3	4.84	19.4		193.5	ND	81.3	53-140			
Aroclor-1260 [2C]	177.5	4.84	19.4	-	193.5	ND	91.7	53-140			
Surrogate: Tetrachloro-m-xylene	15.08			ug/Kg dry	19.35		77.9	44-130			
Surrogate: Tetrachloro-m-xylene [2C]	16.55			ug/Kg dry	19.35		85.6	44-130			
Surrogate: Decachlorobiphenyl	15.33			ug/Kg dry	19.35		79.2	54-121			
Surrogate: Decachlorobiphenyl [2C]	17.72			ug/Kg dry	19.35		91.6	54-121			
Matrix Spike Dup	Source: 16071	45-01	Prepared	& Analyz	ed: 07/21	/2016					
Aroclor-1016	115.5	4.84	19.4	ug/Kg dry	193.3	ND	59.7	47-134	27.1	30	
Aroclor-1016 [2C]	116.3	4.84	19.4		193.3	ND	60.2	47-134	28.4	30	
Aroclor-1260	116.6	4.84	19.4	•	193.3	ND	60.3	53-140	29.7	30	
Aroclor-1260 [2C]	130.2	4.84	19.4	ug/Kg dry	193.3	ND	67.4	53-140	30.7	30	
Surrogate: Tetrachloro-m-xylene	10.75			ug/Kg dry	19.33		55.6	44-130			
Surrogate: Tetrachloro-m-xylene [2C]	11.60			ug/Kg dry	19.33		60.0	44-130			
Surrogate: Decachlorobiphenyl	11.12			ug/Kg dry	19.33		57.5	54-121			
Surrogate: Decachlorobiphenyl [2C]	12.84			ug/Kg dry	19.33		66.5	54-121			
Batch 6G20235											
Blank			Prepared:	07/20/20	l 6 Analy	zed: 07/2	1/2016				
Aroclor-1016	ND	0.120	0.500	ug/L							
Aroclor-1016 [2C]	ND	0.120	0.500	ug/L							
Aroclor-1221	ND	0.120	0.500	ug/L							
Aroclor-1221 [2C]	ND	0.120	0.500	ug/L							
Aroclor-1232	ND	0.120	0.500	ug/L							
EMPIRICAL LABORATORIES, LLC	Work Order:	1607145	Dono	ort Date:	08/10/20	116					e 24 of 3

# Organochlorine Pesticides and PCBs by GC - Quality Control

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 6G20235											
Blank			Prepared:	07/20/20	16 Analy	zed: 07/2	1/2016				
Aroclor-1232 [2C]	ND	0.120	0.500	ug/L							U
Aroclor-1242	ND	0.120	0.500	ug/L							X, U
Aroclor-1242 [2C]	ND	0.120	0.500	ug/L							U
Aroclor-1248	ND	0.120	0.500	ug/L							X, U
Aroclor-1248 [2C]	ND	0.120	0.500	ug/L							U
Aroclor-1254	ND	0.120	0.500	ug/L							U
Aroclor-1254 [2C]	ND	0.120	0.500	ug/L							U
Aroclor-1260	ND	0.120	0.500	ug/L							U
Aroclor-1260 [2C]	ND	0.120	0.500	ug/L							U
Aroclor-1262	ND	0.120	0.500	ug/L							U
Aroclor-1262 [2C]	ND	0.120	0.500	ug/L							U
Aroclor-1268	ND	0.120	0.500	ug/L							U
Aroclor-1268 [2C]	ND	0.120	0.500	ug/L							U
Surrogate: Tetrachloro-m-xylene	0.3592			ug/L	0.5000		71.8	44-124			
Surrogate: Tetrachloro-m-xylene [2C]	0.3726			ug/L	0.5000		74.5	44-124			
Surrogate: Decachlorobiphenyl	0.3145			ug/L	0.5000		62.9	33-116			
Surrogate: Decachlorobiphenyl [2C]	0.3588			ug/L	0.5000		71.8	33-116			
LCS			Prepared:	07/20/20	16 Analy	zed: 07/2	1/2016				
Aroclor-1016	3.700	0.120	0.500	ug/L	5.000		74.0	46-129			
Aroclor-1016 [2C]	3.701	0.120	0.500	ug/L	5.000		74.0	46-129			
Aroclor-1260	3.506	0.120	0.500	ug/L	5.000		70.1	45-134			
Aroclor-1260 [2C]	3.730	0.120	0.500	ug/L	5.000		74.6	45-134			
Surrogate: Tetrachloro-m-xylene	0.3444			ug/L	0.5000		68.9	44-124			
Surrogate: Tetrachloro-m-xylene [2C]	0.3782			ug/L	0.5000		75.6	44-124			
Surrogate: Decachlorobiphenyl	0.1888			ug/L	0.5000		37.8	33-116			
Surrogate: Decachlorobiphenyl [2C]	0.2194			ug/L	0.5000		43.9	33-116			

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#### **Data Qualifiers**

As applicable and where required, the following general qualifiers are associated with the sample results. Additional qualifiers will be specified within the reporting sections of the data package or within the body of the Case Narrative.

#### **Analytical Report Terms and Qualifiers**

- DL: The detection limit (DL) is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The DL is supported by the method detection limit (MDL) which is determined from analysis of a sample containing the analyte in a given matrix.
- LOD: The Limit of Detection is an estimate of the minimum amount of a substance that an analytical process can reliably detect. An LOD is analyte- and matrix-specific and may be laboratory-dependent. This definition is further clarified in the DoD QSM as the smallest amount or concentration of a substance that must be present in a sample in order to be detected at a high level of confidence (99%). At the LOD, the false negative rate (Type II error) is 1%.
- LOQ: The Limit of Quantitation is the minimum level, concentration, or quantity of a target variable (e.g., target analyte) that can be reported with a specified degree of confidence. This term is further clarified within the DoD QSM as the lowest concentration that produces a quantitative result within specified limits of precision and bias.
- \*: Exceeding quality control criteria are associated with the reported result.
- B: The presence of a "B" to the right of an analytical value indicates that this compound was also detected in the method blank and the data should be interpreted with caution. One should consider the possibility that the correct sample result might be less than the reported result and, perhaps, zero.
- D: When a sample (or sample extract) is rerun diluted because one of the compound concentrations exceeded the highest concentration range for the standard curve, all of the values obtained in the dilution run will be flagged with a "D".
- E: The concentration for any compound found which exceeds the highest concentration level on the standard curve for that compound will be flagged with an "E". Usually the sample will be rerun at a dilution to quantitate the flagged compound. For Metals, the qualifier indicates that the serial dilution was outside of the control limits and the compound should be considered estimated due to the presence of interference.
- H1: The result was analyzed outside of the EPA recommended holding time.
- H2: The result was extracted outside of the EPA recommended holding time
- H3: The sample for this analyte was received outside of the EPA recommended holding time.
- J: The presence of a "J" to the right of an analytical result indicates that the reported result is estimated. The mass spectral data pass the identification criteria showing that the compound is present, but the calculated result is less than the LOQ. One should feel confident that the result is greater than zero and less than the LOQ.
- M: Indicates that the sample matrix interfered with the quantitation of the analyte. In dual column analysis the result is reported from the column with the lower concentration. In inorganics, it indicates that the parameters DL/LOD/LOQ have been raised.
- N: The MS/MSD accuracy and/or precision are outside criteria. The predigested spike recovery is not within control limits for the associated parameter.
- P: The associated numerical value is an estimated quantity. There is greater than a 40% difference between the two GC columns for the detected concentrations. The higher of the two values is reported unless matrix interference is obvious or for HPLC analysis where the primary column is reported.
- Q: The relative percent difference (RPD) and/or percent recovery exceeded limits in the associated Blank Spike and/or Blank Spike Duplicate.
- S: The associated internal standard exceeded criteria.
- U: The presence of a "U" indicates that the analyte was analyzed for but was not detected or the concentration of the analyte quantitated below the DL.
- X: The parameter shows a potential positive bias on a reported concentration due to an ICV or CCV exceeding the upper control limit on the high side.
- Y: The parameter shows a potential negative bias on a reported concentration due to an ICV or CCV exceeding the lower control limit on the low side.
- Z: The parameter shows lack of confirmation/detection, which may be due to a negative bias in the ICV or CCV which exceeds the lower control limit.

EMPIRICAL LABORATORIES, LLC Work Order: 1607145 Report Date: 08/10/2016 Page 26 of 30

# EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTO

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SHIP TO: 62	1 Mainstream Drive	Suite 270 + 1	Nashville, 1	TN 37228 + 877	7-345-1113 +	(fax

Send Invoice to:

Send Results to:

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							VOA Headspace Field Filtered Correct Containe Discrepancies Cust. Seals Intac Containers Intac Airbill #: CAR #:	ers ct	Y Y Y Y Y	N N N N N	NA NA NA NA NA
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# **EMPIRICAL LABORATORIES, LLC - CHAIN OF CUSTODY RECORD**

32044

SHIP TO: 621 Mainstream Drive, Suite 270 + Nashville, TN 37228 + 877-345-1113 + (fax) 866-417-0548

Send Results to:	Send Invoice to:	4	Analysis Requirements:	Lab	Use Only:
Name PAUL LAVIDEY Company WESTON Address HOONESTON WAY City W. CHESTER State, Zip PA 19380 Phone 610 701 3798 Fax E-mail P. Laund Y DWISTON Project No./Name: WR FIELD ENVISINGHTOR	Sampler's (Signature):	Me		VOA Headspace Field Filtered Correct Containers Discrepancies Cust. Seals Intact Containers Intact Airbill #:  CAR #:	Y N NA Y N NA S Y N NA
Lab Use Only Lab # Date/Time Sampled	Sample Description Sample Matrix			Comments	No. of Lab Use Only Containers/Pres.
3 07A16 14 071916 16 071916	WRTVISA 6 12" SOIL WRTVISA 6 12" SOIL WRTVISE 6 6 6 SOIL WRTVISC LIBER SOIL	*			
Relinquished by: (Signature)  Received for hatboration by: (Signature)	Date/Time Received By: (Signature)  Date/Time Received By: (Signature)  Date/Time Received By: (Signature)  Date/Time Received By: (Signature)  Date/Time Temperature  7.20.1  Dies accompany sample shipment to laborate	atory; Pin	REMARKS:  ACBs As Aroclor.  L D L  ak retained by samplers.	× M-808ZA	Details:  Page of  Cooler No of  Date Shipped Shipped By  Turnaround  Page 28 of 30

# II. EMPIRICAL LABORATORIES COOLER RECEIPT FORM Workorder# 1407-145

Cooler Received/Opened On: 7/20/16@0850

1.	Tracking #(last 4 digits, FedEx)
	Courier:FED-EX
2.	Temperature of rep. sample or temp blank when opened: $3$ , $C + correction factor (+0.2_) = 3, C + correction factor (+0.2_) = C + correction factor$
3.	If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen?  YES OO.NA
4.	Were custody seals on outside of cooler?
	If yes, how many and where:
5.	Were the seals intact, signed, and dated correctly?
6.	Were custody papers inside cooler?
I cer	rtify that I opened the cooler and answered questions 1-6 (initial/date)
7.	Were custody seals on containers:  YES NO and Intact  YESNO NA
	Were these signed and dated correctly?  YESNoNA
8.	Packing material used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None
9.	Cooling process: Ice   Ice-pack   Ice (direct contact)   Dry ice   Other   None
10.	Did all containers arrive in good condition (unbroken)?
11.	Were all container labels complete (#, date, signed, pres., etc)?
12.	Did all container labels and tags agree with custody papers?  Were VOA vials received?
13.	a. Were VOA vials received?
	b. Was there observable headspace present in any VOA vial (>5mm-6mm)?  YESNONA
14.	Was there a Trip Blank in this cooler (custody seals present/intact)? YESNONAcomments  If multiple coolers, sequence #
I cer	rtify that I unloaded the cooler and answered questions 7-14 (initial/date)
15.	a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level?  YESNO.
	b. Did the bottle labels indicate that the correct preservatives were used?  YESNONA
16.	Was residual chlorine present for Cyanide "Effluent" samples? If so, treated/documented?  YESNO. (NA)
17.	For 608 Pest/PCB samples, was pH <5 or >9? Was residual chlorine present? If either, adjusted/documented? YESNONA
I cer	rtify that I checked for chlorine and pH as per SOP and answered questions 15-17 (initial/date)
18.	Were custody papers properly filled out (ink, signed, etc)?
19.	Did you sign the custody papers in the appropriate place?
20.	Were correct containers used for the analysis requested? YESNONA If not, PM notified? YESNONA
21.	Was sufficient amount of sample sent in each container? VESNONA If not, PM notified? YESNONA
22.	Were there Non-Conformance issues at login? YESNONCR#
I cer	rtify that I entered this project into LIMS and answered questions 18-22 (initial/date)
I cer	rtify that I attached a unique LIMS number label with matching sample name to each container (initial/date) 7.20(6
I cer	rtify that I notified the laboratory of any short holding time or RUSH parameters (initial/date)

#### Empirical Laboratories, LLC Certifications/Approvals (Revised 06/30/2016)

#### DoD ELAP QSM5.0, Certificate Number L2226

- Aqueous
- Non-aqueous
- Expires: 11/30/2018

#### State of Florida, Department of Health - NELAP Primary, Lab ID: E87646

- Clean Water Act
- RCRA/CERCLA
- Expires: 06/30/2017

#### State of Georgia, Environmental Protection Agency - NELAP, Self Certification

• Expires: 06/30/2017

#### Commonwealth of Kentucky, Energy and Environment Cabinet - WWLCP, Laboratory Number: 98017

- Wastewater
- Expires: 12/31/2016

#### Commonwealth of Kentucky, Department of Environmental Protection - UST, Certificate Number: 77

- Aqueous
- Non-aqueous
- Expires: 06/30/2017

#### State of New Jersey, Department of Environmental Protection - NELAP, Lab ID: TN473

- Water Pollution
- Solid and Hazardous Waste
- Expires: 06/30/2017

#### State of North Carolina, Department of Environment and Natural Resources - Certificate Number: 643

- Aqueous
- Non-aqueous
- Expires: 12/31/2016

#### State of Texas, Commission on Environmental Quality - NELAP, Certificate Number: T104704307-16-12

- Aqueous
- Non-aqueous
- Expires: 12/31/2016

#### State of Utah, Department of Health - NELAP, Certificate Number: TN0042015-7

- Aqueous
- Non-aqueous
- Expires: 07/31/2016

#### Commonwealth of Virginia, Department of General Services - NELAP, Certificate Number: 8176, Lab ID: 460243

- Aqueous
- Non-aqueous
- Expires: 12/14/2016

#### State of Washington, Department of Ecology - NELAP, Lab ID: C934-16

- Groundwater
- Solid and Hazardous Waste
- Expires: 03/18/2017